

HEAVY-DUTY TRUCK TECHNICIAN - ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS)

Explore More About This Program: <https://cwi.edu/program/heavy-duty-truck-technician>

Degree Quick Facts

- **Instructional School:** Industry, Engineering, and Trades
- **Department:** Powersports and Diesel Technology
- **Program Code:** TTEC.AAS
- **Program Type:** Career and Technical Education
- **Available Fully Online:** No
- **Eligible for Federal Financial Aid:** Yes

NOTE: Courses required for this program *may* have an additional fee; more information can be found on the [Special Course Fees](#) web page.

Degree Requirements

Course	Course Title	Min Credits
General Education Requirements		
ENGL 101	Writing and Rhetoric I (Recommended GEM 1) ¹	3
COMM 101	Fundamentals of Oral Communication (Recommended GEM 2) ¹	3
MATH 118 & 118L	Technical Math and Technical Math Lab (Recommended GEM 3) ¹	3
PSYC 140	Human Relations for Career and Personal Success (Recommended GEM 6) ¹	3
CWI 101	Connecting With Ideas (Recommended GE Elective) ¹	3
Major Requirements		
TTEC 102	Foundation and Safety	4
TTEC 106	Electrical and Electronic Systems	4
TTEC 110	Engines/Engine Controls	4
TTEC 120	Suspension, Steering, and Brakes	4
TTEC 130	Drivetrains	4
TTEC 140	Preventive Maintenance/HVAC	4
TTEC 155	Truck Driving Skills	1
TTEC 220	Advanced Electrical Systems	4
TTEC 230	Advanced Engine/Engine Controls	4
TTEC 240	Advanced Drivetrains	4
TTEC 250	Advanced Suspension, Steering, and Braking Systems	4
TTEC 260	Advanced Preventive Maintenance/HVAC	4
TTEC 290	Heavy-Duty Truck Technician Capstone	4
Minimum Credit Hours Required		64

¹ The courses listed under the General Education Requirements section are recommended by the department as the most beneficial general education (GE) options for students in this program. **Please note that students may fulfill their GE requirements by completing another course from within the designated general education category.**

Degree Plan: Summer Start

The course sequence listed below is strongly recommended in order to complete your program requirements. Many Career and Technical Education (CTE) courses have prerequisites and/or corequisites that have been accounted for within this Plan of Study Guide. Please register for each semester as shown using the Student Planning tool in myCWI. Consult your advisor for any questions regarding this course sequence plan.

****NOTE****

Heavy-Duty Truck Technician (TTEC) majors are required to complete five general education courses in order to receive an Associate of Applied Science degree. Prior to beginning their TTEC courses, students must successfully complete any two general education courses. While it is recommended that students complete all five of their required general education courses during the spring and/or summer semester(s) prior to beginning the program, students may elect to take the additional required GEM courses during the summer semester between their first and second year in the program, if preferred. Students may also complete GEM courses during regular semesters while enrolled in TTEC courses if they feel

capable of doing so. Students should note that the completion of a GEM 1 (or GEM 2), GEM 3, and GEM 6 course are required *prior* to beginning their final semester of the program.

First Year

Summer		Credit Hours
Full 8-Week Course Session		
CWI 101	Connecting With Ideas (Recommended GE Elective) ¹	3
ENGL 101	Writing and Rhetoric I (Recommended GEM 1) ¹	3
Total Semester Credit Hours		6

Fall

First 5-Week Course Session		
TTEC 102	Foundation and Safety	4
Second 5-Week Course Session		
TTEC 106	Electrical and Electronic Systems	4
Third 5-Week Course Session		
TTEC 110	Engines/Engine Controls	4
Full 16-Week Course Session		
MATH 118 & 118L	Technical Math and Technical Math Lab (Recommended GEM 3) ¹	3
Total Semester Credit Hours		15

Spring

First 5-Week Course Session		
TTEC 120	Suspension, Steering, and Brakes	4
Second 5-Week Course Session		
TTEC 130	Drivetrains	4
Third 5-Week Course Session		
TTEC 140	Preventive Maintenance/HVAC	4
Full 16-Week Course Session		
PSYC 140	Human Relations for Career and Personal Success (Recommended GEM 6) ¹	3
Total Semester Credit Hours		15

Second Year

Summer		
First 4-Week Course Session		
TTEC 155	Truck Driving Skills	1
Full 8-Week Course Session		
COMM 101	Fundamentals of Oral Communication (Recommended GEM 2) ¹	3
Total Semester Credit Hours		4

Fall

First 5-Week Course Session		
TTEC 220	Advanced Electrical Systems	4
Second 5-Week Course Session		
TTEC 230	Advanced Engine/Engine Controls	4
Third 5-Week Course Session		
TTEC 240	Advanced Drivetrains	4
Total Semester Credit Hours		12

Spring

First 5-Week Course Session		
TTEC 250	Advanced Suspension, Steering, and Braking Systems	4
Second 5-Week Course Session		
TTEC 260	Advanced Preventive Maintenance/HVAC	4
Third 5-Week Course Session		

TTEC 290	Heavy-Duty Truck Technician Capstone	4
Total Semester Credit Hours		12
Minimum Credit Hours Required		64

¹ The general education (GE) courses listed above are recommended by the department as the most beneficial GE options for students in this program. **Please note that students may fulfill their GE requirements by completing another course from within the designated general education category.**

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate critical thinking and problem-solving skills identified by the National Institute for Automotive Service Excellence (ASE) Medium/Heavy-Duty Truck Technician Task List for the purpose of becoming a successful entry-level heavy-duty truck technician. Areas of advanced knowledge and skill development include electrical systems, engines and engine controls, braking systems, drivetrains, steering and suspension, preventive maintenance, and HVAC.
- Demonstrate practiced written and oral communication skills consistent with industry.
- Locate and utilize service information and specifications in service manuals and web-based information systems.
- Demonstrate desirable work habits and interpersonal skills essential to successful job performance.
- Demonstrate knowledge and application of safety practices specifically related to heavy-duty diesel repair and maintenance at CWI.
- Demonstrate critical thinking and problem-solving skills.
- Read, interpret, and communicate basic mathematical concepts.

(The CWI Heavy-Duty Truck Technician's program learning outcomes are adapted from the [National Institute for Automotive Service Excellence \(ASE\) Master Standards for Medium/Heavy-Duty Truck Certification](#).)